

# HP StorageWorks

## MSL2024 and MSL4048 Tape Libraries

Product Brief



The HP StorageWorks MSL2024 and MSL4048 Tape Libraries offer remarkable storage density without consuming valuable rack space.

The HP StorageWorks MSL2024 and MSL4048 Tape Libraries deliver the maximum amount of storage in the minimum amount of space for small to medium businesses, unattended workgroups, remote offices, and replicated systems. Both libraries feature a browser-based remote management feature allowing for ease of management from across the room or across the globe and reducing dependencies on local IT staff.

The HP StorageWorks MSL2024 Tape Library provides a compressed capacity of up to 19.2 TB\* in a compact 2U form factor, and offers configuration choices with either one HP StorageWorks Ultrium 960 SCSI or FC Tape Drive, or up to two HP StorageWorks Ultrium 920 or 448 Tape Drives. The library also offers two 12-slot removable magazines, one user-configurable mail slot and a barcode reader for efficient media management.

The HP StorageWorks MSL4048 Tape Library provides a compressed capacity of up to 38.4 TB\* in a 4U form factor, and offers a broad choice of LTO tape drives including one or two HP StorageWorks Ultrium 960 SCSI or FC Tape Drives, or up to four HP StorageWorks Ultrium 920 or 448 Tape Drives. The library also offers four 12-slot removable magazines, and like the MSL2024 offers user-configurable mail slots and a barcode reader.

Both libraries arrive rack-ready for quick installation in a standard 19" rack, but can be converted to a tabletop configuration with a conversion kit.

The HP StorageWorks MSL2024 and MSL4048 Tape Libraries deliver:

- **Value** – high density storage in a compact form factor  
HP StorageWorks MSL2024 Tape Library provides up to 19.2 TB\* of compressed capacity in a 2U form factor  
HP StorageWorks MSL4048 Tape Library delivers up to 38.4 TB\* of compressed capacity in a 4U form factor.
- **Simplicity** – includes a standard bar code reader to facilitate managing and tracking media and an integrated web-based remote management interface eliminates the need for IT resources to be located on site.
- **Agility** – both libraries are easy to manage with removable 12-slot magazines offering bulk loading of media together with bulk media storage offsite. The user configurable mail-slots present an ideal load port, and customer upgradeable drives offer investment protection.

The MSL2024 provides up to 19.2 TB\* of compressed capacity in a compact 2U form factor while the MSL4048 delivers up to 38.4 TB\* of compressed capacity in a 4U form factor.

## Features and Benefits

**Greater value** – both HP MSL Tape Libraries pack the maximum amount of storage into the minimum amount of space;

- The MSL2024 is available in a 2U form factor and stores up to 19.2 TB\* of compressed data with Ultrium 960/920 or up to 9.6 TB\* of data with Ultrium 448 tape technology
- The MSL4048 is available in a 4U form factor and stores up to 38.4 TB\* of compressed data with Ultrium 960/920 or up to 19.2 TB\* of data with Ultrium 448 tape technology.

**Manageability** – the integrated web-based management capability allows an IT administrator to control and troubleshoot the device remotely, eliminating costly onsite IT resources at remote offices.

**Ease of use** – both tape libraries include a standard bar code reader to provide faster inventory times and to facilitate tracking of media. The removable 12-slot magazines, two in the MSL2024 and four in the MSL4048, enable bulk loading of media and also provide a convenient bulk storage unit for moving media off-site. For dedicated import/export of media cartridges, each library includes user-enabled mail slots.

**Extensive compatibility testing** – both libraries are supported on a broad range of industry leading servers, operating systems and backup software. For more information, visit: [www.hp.com/go/ebs](http://www.hp.com/go/ebs)

**Reduced installation time** – the MSL2024 and MSL4048 Tape Libraries are delivered as rack-ready for quick installation in a standard 19" rack; a rack kit is included in the box. A separate rack-to-tabletop conversion kit is available to purchase allowing the library to be configured for a desktop environment.

**Investment protection** – benefit from a straightforward upgrade path as your storage capacity and performance needs grow by adding additional HP StorageWorks Ultrium Tape Drives to your library. The availability of both SCSI and FC tape drive interfaces provide options for installing the library in a SCSI or SAN environment.

\* = using a typical 2:1 data compression ratio

## HP StorageWorks MSL2024 and MSL4048 Tape Library



	MSL2024	MSL4048
<b>Form Factor</b>	2U	4U
<b>Tape drives supported</b>	Ultrium 448 Ultrium 920 Ultrium 960 FC Ultrium 960	Ultrium 448 Ultrium 920 Ultrium 960 FC Ultrium 960
<b>Number of drives supported</b>	One or two Ultrium 920/448 One Ultrium 960	One to four Ultrium 920/448 One or two Ultrium 960
<b>Number of cartridge slots</b>	24	48
<b>Maximum capacity (compressed 2:1)</b>	19.2 TB	38.4 TB
<b>Maximum sustained transfer rate (max number of Ultrium 960 drives) (compressed 2:1)</b>	576 GB/hour	1.152 TB/hour
<b>Dimensions (w x h x l)</b>	3.4 x 17.5 x 31.5 in (8.8 x 44.5 x 80.7 cm) 9.8 x 22.8 x 39 in (25 x 28 x 99 cm) (shipping)	6.8 in X 17.5 in X 30.5 in (17.4 x 44.5 x 77.5 cm) 13.5 in X 23.4 in X 39.1 in (34.4 x 59.6 x 99.4 cm) (shipping)
<b>Weight</b>	34.3 lb (15.6 kg) 57.5 lb (26.1 kg) (shipping)	65.91 lbs (25.6 kg) 83.5 lbs (31.2 kg) (shipping)
<b>Interfaces available</b>	Ultrium 448 SCSI – Ultra160 SCSI LVD/SE Ultrium 920/960 SCSI – Ultra320 SCSI LVD/SE Ultrium 960 4Gb FC – 4 Gb Native Fibre Channel	Ultrium 448 SCSI – Ultra160 SCSI LVD/SE Ultrium 920/960 SCSI – Ultra320 SCSI LVD/SE Ultrium 960 4Gb FC – 4 Gb Native Fibre Channel
<b>What's included</b>	Library unit; 2.5m VHDCI to HDTS68 SCSI cable (1 per tape drive); .5M LVD HDTS to LVD HDTS daisy chain cable (Ultrium 448 and 920 configurations only); (1) RJ-45 Ethernet cable; HDTS68 SCSI terminator (1 per tape drive); rack-mount hardware; product documentation including User & Service Guide (CD) and Getting Started Poster	
<b>Rack-mounting kits</b>	Included with each library rack-mount installation kit (for use with HP's 10000 series, 9000 series, 5000 series or System/E racks)	
<b>Recommended media</b>	For information on recommended HP Storage Media, please visit: <a href="http://www.hp.com/go/storagemedia">www.hp.com/go/storagemedia</a>	

### Warranty

The HP StorageWorks MSL2024 and MSL4048 feature 1-year, next business day, parts exchange. For more information about HP's Global Limited Warranty and Technical Support, visit: [www.hp.com/products/storageworks/warranty](http://www.hp.com/products/storageworks/warranty)

### HP Care Pack services

HP Care Pack Services offer upgraded service levels to extend and expand your standard product warranty with easy-to-buy, easy-to-use support packages that help you make the most of your hardware and software investments. They let you choose the support

levels that meet your business requirements, from basic to mission critical. They help you contain total cost of ownership.

HP Care Pack warranty extensions can be purchased along with HP products to cost-effectively upgrade or extend your warranty. For many products, post-warranty HP Care Pack Services are available when your original warranty has expired. For more information on these services, contact your local HP representative, authorized HP business partner, or visit: [www.hp.com/go/storage/carepacks](http://www.hp.com/go/storage/carepacks)

## Order Information – MSL2024 Tape Library

Product number/SKU	Product name	Description
AG326B	HP StorageWorks MSL2024 1 Ultrium 960 4Gb FC Drive Library	24-slots, one Ultrium 960 4Gb FC drive
AG115A	HP StorageWorks MSL2024 1 Ultrium 960 Drive Library	24-slots, one Ultrium 960 SCSI drive
AH169A	HP StorageWorks MSL2024 1 Ultrium 920 Drive Library	24-slots, one Ultrium 920 drive
AH170A	HP StorageWorks MSL2024 2 Ultrium 920 Drive Library	24-slots, two Ultrium 920 drives
AG116A	HP StorageWorks MSL2024 1 Ultrium 448 Drive Library	24-slots, one Ultrium 448 drive
AG117A	HP StorageWorks MSL2024 2 Ultrium 448 Drive Library	24-slots, two Ultrium 448 drives

## Order Information – MSL4048 Tape Library

Product number/SKU	Product name	Description
AG324B	HP StorageWorks MSL4048 1 Ultrium 960 4Gb FC Drive Library	48-slots, one Ultrium 960 4Gb FC drive
AG325B	HP StorageWorks MSL4048 2 Ultrium 960 4Gb FC Drive Library	48-slots, two Ultrium 960 4Gb FC drives
AG322A	HP StorageWorks MSL4048 1 Ultrium 960 Drive Library	48-slots, one Ultrium 960 drive
AG323A	HP StorageWorks MSL4048 2 Ultrium 960 Drive Library	48-slots, two Ultrium 960 drives
AH171A	HP StorageWorks MSL4048 1 Ultrium 920 Drive Library	48-slots, one Ultrium 920 drive
AH172A	HP StorageWorks MSL4048 2 Ultrium 920 Drive Library	48-slots, two Ultrium 920 drives
AG320A	HP StorageWorks MSL4048 1 Ultrium 448 Drive Library	48-slots, one Ultrium 448 drive
AG321A	HP StorageWorks MSL4048 2 Ultrium 448 Drive Library	48-slots, two Ultrium 448 drives

### Options

AG118A	HP StorageWorks MSL2024/4048 Ultrium 448 Drive Upgrade Kit	Additional Ultrium 448 drive (up to two in MSL2024, up to four in MSL4048)
AH173A	HP StorageWorks MSL2024/4048 Ultrium 920 Drive Upgrade Kit	Additional Ultrium 920 drive (up to two in MSL2024, up to four in MSL4048)
AG327A	HP StorageWorks MSL2024/4048 Ultrium 960 Drive Upgrade Kit	Additional Ultrium 960 drive (only one in MSL2024, up to two in MSL4048)
AG328B	HP StorageWorks MSL2024/4048 Ultrium 960 FC 4Gb Drive Upgrade Kit	Additional Ultrium 960 FC 4Gb drive (only one in MSL2024, up to two in MSL4048)
AG119A	HP StorageWorks MSL2024 Ultrium Left Magazine Kit	For use on the left side of the MSL2024; additional 12-slot magazine including import/export slot
AG330A	HP StorageWorks MSL4048 Ultrium Left Magazine Kit	For use on the left side of the MSL4048; additional 12-slot magazine including import/export slot
AG120A	HP StorageWorks MSL2024/4048 Ultrium Right Magazine Kit	For use on the right side of the MSL2024 and MSL4048; additional 12-slot magazine
AG121A	HP StorageWorks MSL2024 Rack-to-tabletop Conversion Kit	Convert the rack-ready MSL2024 into a desktop model
AG329A	HP StorageWorks MSL4048 Rack-to-tabletop Conversion Kit	Convert the rack-ready MSL4048 into a desktop model

© Copyright 2006 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

For more information visit [www.hp.com/go/tape](http://www.hp.com/go/tape)

5697-6305, October 2006

